

EP739 RS232 protocol function list

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V.C04

Interface

3 wires RS-232C Protocol
Baud Rate : 9600
Data Bits: 8
Parity: None
Stop Bits: 1
Flow Control : None

Command Sequence

Write	Basic Protocol
Header :	'*'
Address Code :	'0' fixed
Command Code :	ASCII Text
Data :	Fixed 3 digits
Terminator Code :	Carriage Return
Delimiter : Space	Carriage Return

Command Sequence

Read	Basic Protocol
Header	'*'
Address Code	'0' fixed
Command Code	ASCII Text
Data	'?' fixed
Terminator Code	Carriage Return
Delimiter	Carriage Return

Acknowledgement

	Basic Protocol
Receive OK	"*000<CR>"
Unknown Command	"*255<CR>"
Invalid Command	"*001<CR>"
In current source	"*002<CR>"
Data value out of range	"*003<CR>"
Data response	As Write Command Format

Function List

	Basic(Original)	Basic (Update)
Power On	* 0 IR 001	OKOKOKOKOK
Power Off	* 0 IR 002	* 0 IR 002
Source PC	* 0 IR 003	* 0 IR 003
Keystone	* 0 IR 004	* 0 IR 004
Zoom(*3)	* 0 IR 005	* 0 IR 005
Mute	* 0 IR 006	* 0 IR 006

Freeze	* 0 IR 007	* 0 IR 007
Menu	* 0 IR 008	* 0 IR 008
Up	* 0 IR 009	* 0 IR 009
Down	* 0 IR 010	* 0 IR 010
Right	* 0 IR 011	* 0 IR 011
Left	* 0 IR 012	* 0 IR 012
Enter	* 0 IR 013	* 0 IR 013
Re-Sync	* 0 IR 014	* 0 IR 014
Source Analog RGB for D-sub	* 0 IR 015	* 0 IR 015
Source Digital RGB	* 0 IR 016	* 0 IR 016
Source HDTV(YPbPr) for D-sub	* 0 IR 017	* 0 IR 017
Source S-Video	* 0 IR 018	* 0 IR 018
Source Composite Video	* 0 IR 019	* 0 IR 019
Source Component Video	* 0 IR 020	* 0 IR 020
Aspect ratio 16: 9	* 0 IR 021	* 0 IR 021
Aspect ratio 4: 3	* 0 IR 022	* 0 IR 022
Volume +	* 0 IR 023	* 0 IR 023
Volume -	* 0 IR 024	* 0 IR 024
Brightness	* 0 IR 025	* 0 IR 025
Contrast	* 0 IR 026	* 0 IR 026
Color Temperature	* 0 IR 027	* 0 IR 027
Source Analog RGB for DVI Port (*4)	* 0 IR 028	* 0 IR 028
Source Analog YPbPr for DVI Port (*4)	* 0 IR 029	* 0 IR 029

Read(Query) Command

	Basic	Return Status	Mean
Lamp Status	* 0 Lamp ? * 0 Lamp	Lamp 0 Lamp 1 0000	Lamp Off Lamp On Get the Lamp Hours
Source	* 0 Src ?	Src 0 Src 1 Src 2 Src 3 Src 4 Src 5 Src 6	No signal connect Analog RGB display Digital RGB display HDTV display S-Video display Composite Video Display Component Video display

PS: 1. Original command is (`*0_IR_002\r\n`,12)

2. Command for “Power On” only is (`OKOKOKOKOK\r\n`,12),

*3. Not support

*4. Select to DVI

Silent mode RS232 implementation.

The objective of silent mode is intended for professional presentation so that the OSD will not pop up to interfere with presentation.

To further enhance the viewing experience of the audience – more precise commands are added to minimize the disruption during a source change.

Furthermore, to avoid confusion with old RS232 commands and possible software maintenance problem the silent OSD are implemented using new RS232 commands. The side benefit of this implementation is user choose silent OSD or non-silent OSD just by invoking different RS232 commands

IR 030	source lock on
IR 031	source lock off
IR 032n	source select n=1 is DVI-D n=2 is DVI-RGB (*1) n=3 is DVI-YPbPr (*1) n=4 is D-sub RGB n=5 is D-sub YPbPr (include 480i, 480p, 720p, 1080i, 576i, 576p) n=6 is D-sub SCART n=7 is RCA YPbPr (include 480i, 480p, 720p 1080i, 576i, 576p)(*2) n=8 is composite n=9 is S-video
IR 033n	aspect ratio n=1 is 4:3 n=2 is 16:9 n=3 is window = 4:3 inside 16:9 n=4 is letterbox
IR 034nn brightness	nn= 00-99, 99 is the brightest
IR 035nn contrast	nn=00-99, 99 is highest contrast
IR 036nn volume	nn=00-99, 99 is loudest
IR 037nn zoom	nn=0-31, 31 is maximum zoom
IR 038n	color temperature n=1 is low n=2 is medium n=3 is high

New read commands (not related to silent mode)

ID? returns ID x x= any unique ID such as serial no.

Hour? returns “HR nnnn\r” nnnn= lamp hours in 4 digits

*1: select to DVI

*2: Not support